## Patent claims

## 1. Compounds of the general formula (I)

5 in which

 $R^1$ 

A represents the group C-R<sup>11</sup> or represents N,

where

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 $R^{11}$  represents hydrogen or  $(C_1-C_4)$ -alkyl,

X represents O, S or CH<sub>2</sub>,

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represents ( $C_6$ - $C_{10}$ )-aryl or represents 5- to 10-membered heteroaryl having up to three heteroatoms from the group consisting of N, O and S, which radicals may for their part each be mono- to trisubstituted by identical or different substituents selected from the group consisting of halogen, cyano, nitro, ( $C_1$ - $C_6$ )-alkyl (which for its part may be substituted by hydroxyl), ( $C_1$ - $C_6$ )-alkoxy, phenoxy, benzyloxy, trifluoromethyl, trifluoromethoxy, ( $C_2$ - $C_6$ )-alkenyl, phenyl, benzyl, ( $C_1$ - $C_6$ )-alkylthio, ( $C_1$ - $C_6$ )-alkylsulphonyl, ( $C_1$ - $C_6$ )-alkoxycarbonyl, carboxyl, amino, ( $C_1$ - $C_6$ )-acylamino, monoand di-( $C_1$ - $C_6$ )-alkylamino and 5- or 6-membered heterocyclyl having up to two heteroatoms from the group consisting of N, O and S,

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or represents a group of the formula

 $R^2$  and  $R^3$  are identical or different and independently of one another represent hydrogen or  $(C_1\text{-}C_6)$ -alkyl or together with the carbon atom to which they are attached form a 3- to 7-membered spiro-linked cycloalkyl ring,

- R<sup>4</sup> represents hydrogen or (C<sub>1</sub>-C<sub>6</sub>)-alkyl,
- 10  $R^5$  represents hydrogen or  $(C_1-C_6)$ -alkyl,
  - $R^6$  represents hydrogen or  $(C_1-C_6)$ -alkyl,
  - $R^7$  represents hydrogen,  $(C_1-C_6)$ -alkyl,  $(C_1-C_6)$ -alkoxy or halogen,

 $R^8$  and  $R^9$  are identical or different and independently of one another represent hydrogen or  $(C_1-C_4)$ -alkyl,

and

R<sup>10</sup> represents hydrogen or represents a hydrolysable group which can be degraded to the corresponding carboxylic acid,

and their pharmaceutically acceptable salts, solvates and solvates of the salts.

- 2. Compounds of the general formula (I) according to Claim 1, in which
  - A represents the group C-R<sup>11</sup> or represents N,

where

R<sup>11</sup> represents hydrogen or methyl,

5 X represents O or S,

R<sup>1</sup> represents phenyl or represents 5- or 6-membered heteroaryl having up to two heteroatoms from the group consisting of N, O and S, which radicals may for their part each be mono- or disubstituted by identical or different substituents selected from the group consisting of fluorine, chlorine, cyano, (C<sub>1</sub>-C<sub>4</sub>)-alkyl, (C<sub>1</sub>-C<sub>4</sub>)-alkoxy, phenoxy, benzyloxy, trifluoromethyl, trifluoromethoxy, vinyl, phenyl, benzyl, methylthio, methylsulphonyl, acetyl, propionyl, (C<sub>1</sub>-C<sub>4</sub>)-alkoxycarbonyl, amino, acetylamino, mono- and di-(C<sub>1</sub>-C<sub>4</sub>)-alkylamino,

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 $R^2$  and  $R^3$  are identical or different and independently of one another represent hydrogen or  $(C_1-C_4)$ -alkyl or together with the carbon atom to which they are attached form a 5- or 6-membered spiro-linked cycloalkyl ring,

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- R<sup>4</sup> represents hydrogen or methyl,
- R<sup>5</sup> represents hydrogen, methyl or ethyl,
- 25 R<sup>6</sup> represents hydrogen or methyl,
  - $R^7$  represents hydrogen,  $(C_1-C_4)$ -alkyl,  $(C_1-C_4)$ -alkoxy, fluorine or chlorine,
- R<sup>8</sup> and R<sup>9</sup> are identical or different and independently of one another represent hydrogen or methyl,

and

R<sup>10</sup> represents hydrogen.

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- 3. Compounds of the general formula (I) according to Claim 1, in which
  - A represents CH or N,
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- X represents O,
- R<sup>1</sup> represents phenyl or represents pyridyl which for their part may each be mono- or disubstituted by identical or different substituents selected from the group consisting of fluorine, chlorine, methyl, tertbutyl, methoxy, trifluoromethyl, trifluoromethoxy, methylthio, amino and dimethylamino,
- R<sup>2</sup> represents hydrogen or methyl,
- 20 R<sup>3</sup> represents methyl, isopropyl or tert-butyl,

or

- R<sup>2</sup> and R<sup>3</sup> together with the carbon atom to which they are attached form a spiro-linked cyclohexane ring,
  - R<sup>4</sup> represents hydrogen or methyl,
  - R<sup>5</sup> represents hydrogen, methyl or ethyl,
- R<sup>6</sup> represents hydrogen or methyl,

R<sup>7</sup> represents methyl,

R<sup>8</sup> and R<sup>9</sup> each represent hydrogen,

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and

R<sup>10</sup> represents hydrogen.

## 10 4. Compounds of the formula (I-A)

in which

15 R<sup>2</sup> represents hydrogen,

R<sup>3</sup> represents methyl, isopropyl or tert-butyl,

or

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R<sup>2</sup> and R<sup>3</sup> both represent methyl or together with the carbon atom to which they are attached form a spiro-linked cyclohexane ring,

and

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A,  $R^1$ ,  $R^4$ ,  $R^5$  and  $R^6$  are each as defined in Claims 1 to 3.

5. Process for preparing the compounds of the general formula (I) or (I-A) as defined in Claims 1 to 4, characterized in that

compounds of the general formula (II)

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in which A, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> are each as defined in Claim 1 and

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Y represents chlorine or bromine,

are initially converted using a compound of the general formula (III)

$$\begin{array}{c|c} R^7 & X & O \\ \hline CI & R^6 & R^9 & O - T \end{array}$$
 (III),

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in which X, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> are each as defined in Claim 1 and

T represents benzyl or  $(C_1-C_6)$ -alkyl,

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in an inert solvent in the presence of a base into compounds of the general formula (IV)

in which A, T, X, Y,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ ,  $R^7$ ,  $R^8$  and  $R^9$  are each as defined in Claim 1,

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these compounds are then reacted in a coupling reaction with a compound of the general formula (V)

$$\begin{array}{ccc}
O - R^{12} \\
R^{1} - B & (V), \\
O - R^{12} & \end{array}$$

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in which R<sup>1</sup> is as defined in Claim 1 and

-CH<sub>2</sub>CH<sub>2</sub>- or -C(CH<sub>3</sub>)<sub>2</sub>-C(CH<sub>3</sub>)<sub>2</sub>- bridge,

R<sup>12</sup> represents hydrogen or methyl or both radicals together form a

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in an inert solvent in the presence of a suitable palladium catalyst and a base to give compounds of the general formula (I-B)

$$R^{1}$$
 $R^{2}$ 
 $R^{3}$ 
 $R^{4}$ 
 $R^{7}$ 
 $R^{8}$ 
 $R^{9}$ 
 $O-T$ 
 $O-T$ 
 $O-T$ 
 $O-T$ 
 $O-T$ 
 $O-T$ 

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in which A, T, X, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> are each as defined in Claim 1,

the compounds (I-B) are then reacted with acids or bases or, if T represents benzyl, also hydrogenolytically, to give the corresponding carboxylic acids of the general formula (I-C)

$$R^{1}$$
 $R^{2}$ 
 $R^{3}$ 
 $R^{4}$ 
 $R^{7}$ 
 $R^{8}$ 
 $R^{9}$ 
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in which A, X, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> are each as defined in Claim 1,

and the carboxylic acids (I-C) are, if appropriate, further modified by known esterification methods to give compounds of the general formula (I).

- 6. Compounds of the formula (I) or (I-A) as defined in Claims 1 to 5 for the prevention and treatment of diseases.
- Medicaments, comprising at least one compound of the formula (I) or (I-A) as
   defined in Claims 1 and 5, respectively, and inert non-toxic pharmaceutically acceptable carriers, auxiliaries, solvents, vehicles, emulsifiers and/or dispersants.
- 8. Use of compounds of the formula (I) or (I-A) and medicaments as defined in Claims 1 to 7 for the prevention and treatment of diseases.

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- 9. Use of compounds of the formula (I) or (I-A) as defined in Claims 1 to 6 for preparing medicaments.
- 10. Use of compounds of the formula (I) or (I-A) as defined in Claims 1 to 5 for preparing medicaments for the prevention and treatment of stroke, arteriosclerosis, coronary heart diseases and dyslipidaemias, for the prophylaxis of myocardial infarction and for the treatment of restenosis after coronary angioplasty or stenting.
- 10 11. Method for preventing and treating diseases, characterized in that compounds of the formula (I) or (I-A) as defined in Claims 1 and 5 are allowed to act on living beings.